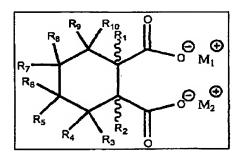
## **Amendments to the Claims**

That which is claimed is:

1. (Currently amended) An organic nucleating agent which induces b-axis orientation within a test homopolymer polypropylene formulation to a degree in which a relative angle (ND) of greater than 13.5 is detected, wherein the unnucleated test homopolymer polypropylene formulation exhibits a density of about 0.9 g/cc, a melt flow of about 12 g/10 min, a Rockwell Hardness (R scale) of about 90, a tensile strength of about 4,931 psi, an elongation at yield of about 10%, a flexural modulus of about 203 kpi, an Izod impact strength of about 0.67 ft-lb/in, and a deflection temperature at 0.46 mPa of about 93°, and wherein said formulation comprising said combination is extruded then molded into plaques having dimensions of about 51 mm X 76 mm X 3.00 mm, wherein the total amount of said organic nucleating agent present within said test homopolymer is at most 0.25% by weight, and wherein said nucleating agent is a compound conforming to Formula (I)

**(II)** 



wherein M<sub>1</sub> and M<sub>2</sub> are the same or different, or M<sub>1</sub> and M<sub>2</sub> are combined to form a single moiety, and are selected from at least one Group I or Group II metal cation, and wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub>, R<sub>9</sub>, and R<sub>10</sub> are either the same or different and are individually selected from the group consisting of hydrogen, C<sub>1</sub>-C<sub>9</sub> alkyl, wherein any two vicinal or gerninal alkyl groups may be combined to form a carbocyclic ring of up to six carbon atoms, hydroxy, C<sub>1</sub>-C<sub>9</sub> alkyleneoxy, amine, and C<sub>1</sub>-C<sub>9</sub> alkylamine, halogens, and phenyl.

- 2. (Original) A thermoplastic composition comprising the organic nucleating agent as defined in Claim 1.
- 3. (Original) The thermoplastic composition of Claim 2 wherein said thermoplastic is a polyolefin.
- 4. (Original) The polyolefin composition of Claim 3 wherein said polyolefin is a polypropylene.
- 5. (Currently amended) An organic nucleating agent which induces a stiffness to impact balance ratio (S/I) of greater than 4.5 within a test homopolymer polypropylene formulation, wherein the unnucleated test homopolymer polypropylene formulation exhibits a density of about 0.9 g/cc, a melt flow of about 12 g/10 min, a Rockwell Hardness (R scale) of about 90, a

tensile strength of about 4,931 psi, an elongation at yield of about 10%, a flexural modulus of about 203 ksi, an Izod impact strength of about 0.67 ft-lb/in, and a deflection temperature at 0.46 mPa of about 93°, and wherein said formulation comprising said combination is extruded then molded into plaques having dimensions of about 51 mm X 76 mm X 3.00 mm, wherein the total amount of said organic nucleating agent present within said test homopolymer is at most 0.25% by weight, and wherein said nucleating agent is a compound conforming to Formula (I)

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$$\begin{array}{c|c} R_8 & R_{10} & \bigcirc & \bigcirc & \bigcirc \\ R_7 & & & \bigcirc & M_1 \\ \hline R_6 & & & & \bigcirc & M_2 \\ \hline R_6 & & & & & \bigcirc & M_2 \\ \hline \end{array}$$

wherein M<sub>1</sub> and M<sub>2</sub> are the same or different, or M<sub>1</sub> and M<sub>2</sub> are combined to form a single moiety, and are selected from at least one Group I or Group II metal cation, and wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>8</sub>, R<sub>7</sub>, R<sub>8</sub>, R<sub>9</sub>, and R<sub>10</sub> are either the same or different and are individually selected from the group consisting of hydrogen, C<sub>1</sub>-C<sub>9</sub> alkyl, wherein any two vicinal or geminal alkyl groups may be combined to form a carbocyclic ring of up to six carbon atoms, hydroxy, C<sub>1</sub>-C<sub>9</sub> alkyleneoxy, amine, and C<sub>1</sub>-C<sub>9</sub> alkyleneoxy, and phenyl.

- 6. (Original) A thermoplastic composition comprising the organic nucleating agent defined in Claim 5.
- 7. (Original) The thermoplastic composition of Claim 6 wherein said thermoplastic is a polyolefin.
- 8. (Original) The polyolefin composition of Claim 7 wherein said polyolefin is a polypropylene.
- 9. (Currently amended) A polypropylene article comprising at least one cyclic dicarboxylate nucleating agent, wherein said polypropylene comprises at least a fraction of homopolymer and exhibits a b-axis orientation, wherein said at least one nucleating agent exhibits very low hygroscopicity, and wherein said at least one nucleating agent induces a crystallization temperature of at least 116°C within a test homopolymer propylene formulation, wherein the unnucleated test homopolymer propylene formulation exhibits a density of about 0.9 g/cc, a melt flow of about 12 g/10 min, a Rockwell Hardness (R scale) of about 90, a tensile strength of about 4,931 psi, an elongation at yield of about 10%, a flexural modulus of about 203 ksi, an Izod impact strength of about 0.67 ft-lb/in, and a deflection temperature at 0.46 mPa of about 93°, and wherein said formulation comprising said combination is extruded then molded into plaques having dimensions of about 51 mm X 76 mm X 3.00 mm, wherein said peak crystallization temperature is measured by differential scanning calorimetry in

accordance with a modified ASTM Test Method D3417-99 at heating and cooling rates of 20°C/minute, wherein the total amount of said organic nucleating agent present within said test homopolymer is at most 0.25% by weight, and wherein said nucleating agent is a compound conforming to Formula (I)

<u>(I)</u>

$$\begin{array}{c|c}
R_{3} & R_{10} & \bigcirc & \bigoplus \\
R_{7} & & & \bigcirc & \bigoplus \\
R_{8} & & & \bigcirc & \bigoplus \\
R_{8} & & & & \bigcirc & \bigoplus \\
R_{10} & & & & \bigcirc & \bigoplus \\
O & M_{1} & & & & \bigcirc & \bigoplus \\
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O & M_{4} & & & \bigcirc \\
O & M_{5} & & &$$

wherein M<sub>1</sub> and M<sub>2</sub> are the same or different, or M<sub>1</sub> and M<sub>2</sub> are combined to form a single moiety, and are selected from at least one Group I or Group II metal cation, and wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>8</sub>, R<sub>7</sub>, R<sub>8</sub>, R<sub>9</sub>, and R<sub>10</sub> are either the same or different and are individually selected from the group consisting of hydrogen, C<sub>1</sub>-C<sub>9</sub> alkyl, wherein any two vicinal or gerninal alkyl groups may be combined to form a carbocyclic ring of up to six carbon atoms, hydroxy, C<sub>1</sub>-C<sub>9</sub> alkyleneoxy, amine, and C<sub>1</sub>-C<sub>9</sub> alkylamine, halogens, and phenyl.

## 10. (Cancelled)

11. (Currently amended) The article of Claim  $\frac{10}{9}$  wherein each of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub>, R<sub>9</sub>, and R<sub>10</sub> are hydrogen and M<sub>1</sub> and M<sub>2</sub> are combined as a single calcium ion.

12-13. (Cancelled)